

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application Number : 10/811,998 Confirmation No.: 2680  
Applicant : Ruey J.YU, *et al.*  
Filed : March 30, 2004  
Title : OLIGOSACCHARIDE ALDONIC ACIDS AND THEIR TOPICAL USE  
TC/Art Unit : 1616  
Examiner: : Nathan W. Schlientz  
  
Docket No. : BMR-001 C2  
Customer No. : 70813

**MAIL STOP AMENDMENTS**  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**SUBSTANCE OF TELEPHONIC INTERVIEW  
HELD ON JUNE 10, 2008**

Sir:

Examiner Schlientz contacted the undersigned on June 17, 2008, regarding the above-captioned application, and the undersigned conducted a telephonic interview with Examiner Schlientz on June 18, 2008. The Examiner forwarded to applicant's representative the article Wolfrom, *et al.*, "Structures of Isomaltose and Gentiobiose" from an unknown publication. The article discloses isomaltose and gentiobiose, and the Examiner alleged that it was his belief that these structures were cyclic forms of the aldobionic acids isomaltobionic acid and gentiobionic acid, which are recited in the pending claims.

The undersigned representative of the applicants pointed out that the conversion of the aldehyde-containing isomaltose to isomaltobionic acid does not occur naturally, but occurs via reaction, as described in the specification. The undersigned explained the structural differences

between isomaltose and isomaltobionic acid, as shown in the the attached document. The undersigned further explained that the cyclic form of isomaltobionic acid or gentiobionic acid is created by the loss of water from the molecule, thus creating a lactone. Because lactone forms are already recited in the claims, the undersigned authorized the Examiner to cancel "or cyclic forms thereof" from the claims.

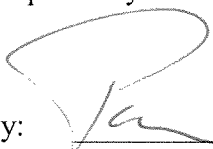
The Examiner also argued that it was his belief that the -ose- form and that bionic acid forms co-exist naturally, alleging that glucose and gluconic acid exist in equilibrium in water. The undersigned argued that glucose and gluconic acid do not exist in equilibrium, and that the Examiner might have been confusing gluconolactone and gluconic acid, which do exist in equilibrium, as set out in the Merck Index, 13<sup>th</sup> Ed., item 4470, page 793.

The Examiner stated that he would have to consult with his supervisor.

No additional fee is believed to be required for entry and consideration of this response. Nevertheless, in the event that the U.S. Patent and Trademark Office requires any additional fee to enter this response or to maintain the instant application pending, please charge such fee to the undersigned's Deposit Account No. 50-4494.

Respectfully submitted,

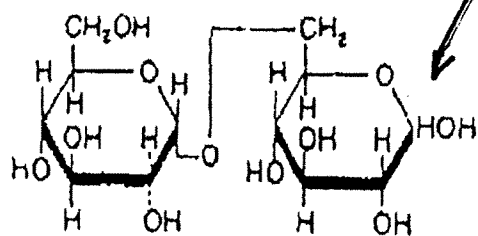
Dated: July 1, 2008

By:   
Patrick A. Doody  
Registration No. 35,022

Tel No. (202) 346-4128  
Fax No. (202) 346-4444

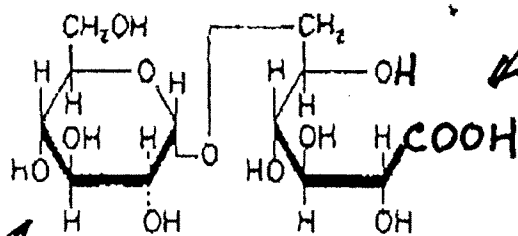
Goodwin Procter LLP  
901 New York Avenue, NW  
Washington, DC 20001  
Goodwin Customer No. 70813

2 cyclic rings



Isomaltose (amorphous)

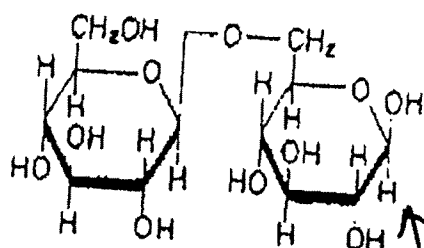
aldehyde



acid

Isomaltobionic Acid

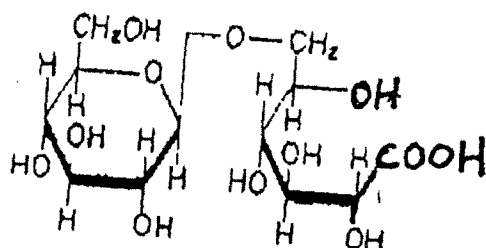
2 cyclic rings



β-Gentiobiose

aldehyde

one cyclic ring



acid

Gentiobionic Acid